FCC 92-340

## Federal Communications Commission ODICINAL

FOC MAIL SECTION

Before the Federal Communications Commission Washington, D.C. 20554 2 2 36 PM \*92

ET Docket No. 92-1651 SPACHED BY

In the Matter of

Revision of Part 15 of the Rules to Expand the Restricted Bands of Operation

### NOTICE OF PROPOSED RULE MAKING

Adopted: July 22, 1992;

Released: August 12, 1992

Comment Date: November 2, 1992 Reply Comment Date: February 15, 1993

By the Commission:

#### INTRODUCTION

1. This Notice of Proposed Rule Making proposes to amend Part 15 of the rules to restrict the operation of low power, non-licensed transmitters within the frequency bands that were recently authorized for the Global Maritime Distress and Safety System (GMDSS).

## **BACKGROUND**

2. The Commission has established frequency bands within which Part 15 transmitters, or intentional radiators, are prohibited from operating. These restricted bands were established to protect against interference to services involving safety-of-life and services that use very low received signal levels.<sup>2</sup>

3. The GMDSS is an automated ship-to-shore distress alerting system that relies on satellite and advanced terrestrial systems. The GMDSS is used for worldwide alerting, coordinated search and rescue operations and the dissemination of maritime safety information. The GMDSS represents more than a decade of work by the International Maritime Organization (IMO) and the International Telecommunication Union (ITU). On January 16, 1992, the Commission adopted a Report and Order incorporating GMDSS requirements into its Maritime Services Rules. 4

## **DISCUSSION**

- 4. The frequency bands employed for GMDSS are used for safety-of-life purposes and, therefore, meet the criteria for protection as restricted frequency bands under Part 15. International radio regulations require that the GMDSS bands be protected from other interfering sources.<sup>5</sup> Accordingly, we are proposing that the list of restricted frequency bands in Part 15 be expanded to contain the GMDSS bands. A list of the 17 proposed new restricted bands, along with an explanation of their uses, is contained in Appendix B.6 We have purposely specified these bands to be as narrow as possible, basing them on the allocated channel bandwidth without guardbands, in order to reduce the impact on Part 15 equipment. We believe the proposed changes will have a minimal impact on the design and operation of Part 15 devices, yet will provide essential protection to GMDSS operations.
- 5. We also propose to reduce the width of the existing restricted frequency band of 490-510 kHz to 495-505 kHz, effective February 1, 1999. This restricted band provides interference protection to the maritime distress frequency 500 kHz. The guardbands for that frequency are scheduled to be reduced when the GMDSS is fully implemented on February 1, 1999.
- 6. Transition provisions. The GMDSS is being phased in between 1992 and 1999. Because ships can start using GMDSS equipment today, we believe that the new restricted bands should become effective as soon as possible. Accordingly, we propose that any Part 15 intentional radiator that is verified, or for which an application for a grant of equipment authorization is submitted, on or after

<sup>2</sup> See First Report and Order, GEN Docket No. 87-389, 4 FCC Rcd 3493 (1989), at para. 61-74. See, also, Memorandum, Opinion and Order, GEN Docket No. 87-389, 6 FCC Rcd 5405 (1991), at

para. 14-17.

<sup>3</sup> The ITU adopted the GMDSS associated revisions to the Radio Regulations in November, 1987. See, Final Acts of the World Administrative Radio Conference for Mobile Services (MOB-87), Geneva, 1987. In November 1988, the IMO adopted amendments to the 1974 SOLAS Convention to implement the GMDSS internationally. See, Final Acts of the Conference of Contracting Governments to the International Convention for the Safety of Life at Sea, 1974, on the Global Maritime Distress and Safety System, London, 1988 (GMDSS Amendments).

<sup>4</sup> See Report and Order, PR Docket No. 90-480, 7 FCC Rcd 951 (1992). The GMDSS regulations, contained in 47 CFR Part 80, apply to cargo ships of 300 tons gross tonnage and over when traveling on international voyages or in the open sea, and to ships carrying twelve passengers or more irrespective of size when traveling on international voyages or in the open sea.

These ships are termed "compulsory ships."

<sup>5</sup> See ITU Radio Regulations, RRN38-11, Section 44, N 3067 Mob-87, 1990. As stated therein, any emission capable of causing harmful interference to certain GMDSS frequency bands used for distress, alarm, urgency or safety communications is prohibited. For other GMDSS frequency bands, the ITU regulations state only that emissions causing harmful interference are prohibited.

<sup>6</sup> We have limited our proposal to include only those frequencies requiring special protection based on N 3067 Mob-87 of the ITU Radio Regulations. (Nine of the frequencies are already included in the restricted bands.) Although the U.S. implementation of the GMDSS includes several other frequencies, we are not proposing to include these because the ITU Radio Regulations do not specify the same protection requirements for these frequencies. We believe our existing Part 15 regulations are adequate to avoid harmful interference on these frequencies, satisfying the provisions of the ITU regulations.

We are aware that some existing Part 15 transmitters sweep through a number of these proposed restricted bands. However, swept frequency devices are exempt, under certain conditions, from the restricted band requirements. See 47 CFR Section

15.205(d)(1).

<sup>&</sup>lt;sup>1</sup> See 47 CFR Section 15.205. Within the restricted frequency bands, Part 15 transmitters are permitted to radiate only spurious emissions that must not exceed the general radiated emission limits in 47 CFR Section 15.209.

90 days from the effective date of a Report and Order in this proceeding must comply with the requirements associated with the new restricted bands of operation. Similarly, any Part 15 intentional radiator that is manufactured or imported on or after 15 months from this effective date must comply with the new restricted band requirements.

#### PROCEDURAL MATTERS

- 7. This is a non-restricted notice and comment rule making proceeding. Ex parte presentations are permitted, except during the Sunshine Agenda period, provided they are disclosed as provided in the Commission's rules. See generally 47 CFR Sections 1.1202, 1.1203, and 1.1206(a).
- 8. Initial Regulatory Flexibility Analysis. As required by Section 603 of the Regulatory Flexibility Act, the Commission has prepared an Initial Regulatory Flexibility Analysis (IRFA) of the expected impact on small entities of the proposals suggested in this document. The IRFA is set forth in Appendix A. Written public comments are requested on the IRFA. These comments must be filed in accordance with the same filing deadlines as comments on the rest of the Notice, but they must have a separate and distinct heading designating them as responses to the Initial Regulatory Flexibility Analysis. The Secretary shall send a copy of this Notice of Proposed Rule Making, including the Initial Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration in accordance with paragraph 603(a) of the Regulatory Flexibility Act. Pub. L. No. 96-354, 94 Stat. 1164, 5 U.S.C. Section 601 et seg (1981).
- 9. Comment Dates. Pursuant to applicable procedures set forth in Sections 1.415 and 1.419 of the Commission's Rules, 47 C.F.R. Sections 1.415 and 1.419, interested parties may file comment on or before November 2, 1992, and reply comments on or before February 15, 1993. To file formally in this proceeding, you must file an original and five copies of all comments, reply comments, and supporting comments. If you want each Commissioner to receive a personal copy of your comments, you must file an original plus nine copies. You should send comments and reply comments to Office of the Secretary, Federal Communications Commission, Washington, D.C. 20554. Comments and reply comments will be available for public inspection during regular business hours in the Dockets Reference Room of the Federal Communications Commission, 1919 M Street, N.W., Washington, D.C. 20554.
- 10. The proposed action is authorized under Sections 4(i), 301, 302, 303(e), 303(f), and 303(r) of the Communications Act of 1934, as amended, 47 U.S.C. Sections 154(i), 301, 302, 303(e), 303(f), and 303(r).
- 11. For further information regarding this Notice of Proposed Rule Making, contact John Reed, Office of Engineering and Technology, (202) 653-6288.

## FEDERAL COMMUNICATIONS COMMISSION

Donna R. Searcy
Secretary

Donna R. Searcy

Secretary

## APPENDIX A

#### INITIAL REGULATORY FLEXIBILITY ANALYSIS

#### Reason for Action

This rule making proceeding is initiated to obtain comment regarding the addition of new restricted bands of operation, representing frequency bands employed by the Global Maritime Distress and Safety System (GMDSS) under Part 80 of our rules, for Part 15 intentional radiators.

## **Objectives**

The Commission seeks to add these new restricted bands of operation to provide additional protection against harmful interference to the GMDSS.

#### Legal Basis

The proposed action is authorized under Sections 4(i), 301, 302, 303(e), 303(f), and 303(r) of the Communications Act of 1934, as amended, 47 U.S.C. Sections 154(i), 301, 302, 303(e), 303(f), and 303(r).

# Reporting, Recordkeeping and Other Compliance Requirements

Manufacturers of Part 15 transmitters are already required to measure emissions from their products. An increase in the number of restricted frequency bands will not impact the requirement for making and reporting these measurements to the Commission. Accordingly, we do not expect any significant increase or decrease in the overall recordkeeping requirements.

# Federal Rules Which Overlap, Duplicate or Conflict With These Rules

None.

## Description, Potential Impact and Number of Small Entities Involved

Part 15 transmitters are not permitted to operate within the restricted frequency bands. Further, spurious emissions from Part 15 transmitters that fall within these bands must be reduced to the general radiated emission limits in 47 CFR Section 15.209. Conceivably, the addition of new restricted bands could require manufacturers to redesign their products to operate on other frequencies or to further reduce spurious emissions. However, we believe that there are few, if any, Part 15 devices currently operating within these frequency bands. In addition, the majority of the proposed new restricted bands are at lower frequencies where spurious emissions from Part 15 transmitters must already comply with the general limits in 47 CFR Section 15.209. Thus, we expect any impact from this proposal to be minimal.

# Any Significant Alternatives Minimizing the Impact on Small Entities Consistent with Stated Objectives

None.

## APPENDIX B

The GMDSS frequency bands proposed for addition to the list of restricted frequency bands in 47 CFR Section 15.205 are:

495.0-505.0 kHz <sup>1</sup>	8414.25-8414.75 kHz
4123.5-4126.5 kHz	12.2885-12.2915 MHz
4177.25-4177.75 kHz	12.51975-12.52025 MHz
4207.25-4207.75 kHz	12.57675-12.57725 MHz
6213.5-6216.5 kHz	16.4185-16.4215 MHz
6267.75-6268.25 kHz	16.69475-16.69525 MHz
6311.75-6312.25 kHz	16.80425-16.80475 MHz
8289.5-8292.5 kHz	156.52475-156.52525 MHz
8376.25-8386.75 kHz	1645.5-1646.5 MHz

These frequency bands are used for the following pur-

I. Digital Selective Calling (DSC) for distress and safety calls, with a bandwidth of  $\pm 0.25$  kHz:

4207.5 kHz	12.577 MHz
6312.0 kHz	16.8045 MHz
8414.5 kHz	156.525 MHz

II. Alerting via satellite EPIRBs:

1645.5-1646.5 MHz<sup>2</sup>

III. Narrowband Direct Printing (NBDP) used exclusively for distress and safety communications, with a bandwidth of  $\pm 0.25$  kHz:

4177.5 kHz	12.520 MHz
6268.0 kHz	16.695 MHz
8376 5 kHz	

IV. Radiotelephony (SSB) used for distress and safety communications, with a bandwidth of  $\pm 1.5$  kHz:

4125 kHz <sup>3</sup>	12.29 MHz
6215 kHz	16.42 MHz
8291 kHz	

In addition to EPIRBs, this band can be used for the relay of

distress alerts between satellites.

<sup>&</sup>lt;sup>1</sup> The band 490-510 kHz is already designated as a restricted band; however, we propose to narrow this band to 495-505 kHz on February 1, 1999.

<sup>3</sup> This band may also be used by aircraft stations to communicate with stations of the maritime mobile service for distress and safety purposes, including search and rescue.